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10/051,938	01/17/2002	Eugene R. Zehler	M 5850A-OS/LUAP	3048

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EXAMINER
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KING, BRADLEY T

ART UNIT	PAPER NUMBER
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3683

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 14

Application Number: 10/051,938  
Filing Date: January 17, 2002  
Appellant(s): ZEHLER, EUGENE R.

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Aaron Ettelman  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 12/15/03.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

Appellant's brief includes a statement that claims stand or fall together for each grounds of rejection.

**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

5681800	Duncan et al	10-1997
2630193	Funkhouser	3-1950

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 46-48, 62-64, and 76 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 46-51, 62-66 and 76 (added in the amendment on 1/17/02) have limitations requiring a mixture of monocarboxylic acid and dicarboxylic which are not supported by the disclosure and therefore are held as new matter.

Claims 38-40, 43, 52, 54-56, 59, 67-70, 73, 77-78, and 81-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duncan et al (US# 5681800) in view of Funkhouser (US# 2630193).

Duncan et al disclose biodegradable lubricants and further discloses a variety of applications including hydraulic fluids (see column 1, lines 30-33). The composition in table 8 (TPE/C810/Ck8) includes pentaerythritol (polyol component) with a carboxylic acid component (C810) having a mixture of linear C6 and C8 acids (note table 1 where

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Duncan discloses that a typical C810 sample contains both C6 and C8 acids) and the biodegradability is at least %80. Funkhouser discloses all the features of the shock absorber including a cylinder 20 containing a fluid, a piston rod 26, a piston, first and second chambers and means for permitting fluid communication being disposed in at least a portion of the piston. Funkhouser remains silent as to the composition of the fluid within the absorber. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the fluid disclosed by Duncan et al with a shock absorber as taught by Funkhouser as an obvious implementation of the fluid which addresses environmental concerns with regards to leaking shock absorbers.

**(11) *Response to Argument***

**A. 112 1<sup>st</sup> Rejection**

Claims 46, 62 and 76 all require a polyol ester having a polyol component and a carboxylic acid component, the carboxylic acid component comprising mixture of two or more C5, C6, C7 C8 and C9 linear mono-carboxylic acids, the carboxylic acid component further comprising a di-carboxylic acid, and the fluid having at least %80 biodegradability. It is maintained that the original disclosure fails to disclose the claimed combination. The mere suggestion that esters according to the invention can be made by the method described in the incorporated reference fails to support the specific fluid composition recited by the instant claims. While the incorporated reference may contemplate esters with monovalent and divalent acids components, there is no

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mention of a carboxylic acid component comprising a mixture of two or more C5, C6, C7, C8 and C9 linear mono-carboxylic acids and further comprising di-carboxylic acid as recited by the claims. Likewise, there is no indication of what the biodegradability of such a composition may be, though the claims require at least %80 biodegradability. The instant disclosure states that the dampening fluids according to the invention are comprised of polyol esters where the carboxylic acid component is a mono-carboxylic acid having about 5 to about 18 carbon atoms (page 3, lines 1-5). There is no indication that the carboxylic acid component of the instant invention at the time of filing was composed of anything other than mono-carboxylic acid. It is maintained that the rejection is proper.

#### **B. and C. Duncan in view of Funkhouser**

It is maintained that all limitations of the rejected claims directed towards the biodegradable fluid composition are disclosed by Duncan et al. The composition "TPE/C810/Ck8" disclosed in table 8 is a polyol ester which contains a polyol component comprising a hindered polyol (TPE) and a carboxylic acid component (C810) comprising a mixture of C6 and C8 linear acids. Note both table 1 and table 2 disclose that C810 contains C6 and C8 acids and further provides percentages of C6 and C8 acids in the acid component. Also note column 20, lines 44-50 which describe C810 as "mixed linear C6-C12 acids", as well as column 7, lines 33-45. It is maintained that Duncan et al clearly and explicitly disclose a mixture C6 and C8 linear acids which reads on the claimed carboxylic acid component. Duncan et al further disclose a variety

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of applications for the biodegradable lubricant including hydraulic fluids (see column 1, lines 30-33). Duncan et al only lack the disclosure of a hydraulic shock absorber and associated structure. The recited structure is well known and conventional for shock absorbers such as illustrated by Funkhouser et al. It is maintained that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the fluid disclosed by Duncan et al with a shock absorber such as illustrated by Funkhouser as an obvious implementation of the fluid, thereby providing an environmentally friendly shock absorber.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,


BTK  
February 23, 2004

Conferees

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